Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

In addition to the somites represented by the compound eyes and the antennæ, many Collembola possess rudimentary intercalary appendages, indicating a third premandibular somite. The remaining somites are represented by the mandibles, the superlinguæ, the first maxillæ, and the labium. At an early stage these seven somites have each a pair of ganglia; the three pairs of premandibular ganglia unite to form the supraœsophageal ganglion, and the remaining four pairs fuse to form the subœsophageal ganglion. A comparison of the hexapod and crustacean head is shown as follows:—

SOMITE.	HEXAPODA.	CRUSTACEA.
1	Compound Eyes	Compound Eyes
2	Antennæ	Antennules
3	Intercalary Appendages	Antennæ
4	Mandibles	Mandibles
5	Superlinguæ	First Maxillæ
6	First Maxillæ	Second Maxillæ
7	Labium	First Maxillipedes

G. H. P.

The optic nerves of amphibians, according to the researches of Fritz,[1] undergo a total crossing in the chiasma, so that all the fibres from one eye pass to the other side of the brain. The chiasma has the form of interwoven bundles, which in the Urodela are larger in the middle of the nerves and smaller dorsally and ventrally, and in the Anura are larger ventrally and smaller dorsally. The chiasma has relatively few glia cells compared with the optic nerve. The courses of the nerve fibres in the chiasma were demonstrated by ordinary histological methods and degeneration experiments. Four weeks after the extirpation of an eye the optic nerve fibres began to show the first evidences of degeneration, a condition obtained in warm-blooded animals in two days. In seven months after the removal of the eye the severed nerve had entirely disappeared. The process of absorption which accompanies the degeneration of the nerves in Amphibia makes the degeneration method much less satisfactory for these animals than for other vertebrates. G. H. P.

Notes.—The few Ophidian tapeworms heretofore known have been supplemented by the discovery of a new species, *Ichthyotænia*

---

[1] Fritz, F. Ueber die Struktur des Chiasma nervorum opticorum bei Amphibien, *Jena. Zeitschr. für Naturwissenschaften*, Bd. xxxiii, pp. 191–262, Taf. VI–XI. 1899.

Calmettei Barrois, in *Bothrops lanceolatus* from Martinique. G. Marotel gives (*Arch. Parasitol.*, Vol. II, Part I, pp. 34–42, 4 text-figs.) a full account of its structure and demonstrates its affinity to the fish cestodes of the genus Ichthyotænia.

An interesting case of nursing habits among frogs is reported by Brauer (*Zool. Jahrb.*, *Abt. Syst.*, Bd. XII, 1898, pp. 89–94) for *Arthroleptis seychellensis.* The eggs are deposited on the ground and brooded by the adult, probably the male; when the larvæ desert the shell, they possess posterior extremities, already indicated, and a long tail. They creep onto the back of the adult, fasten themselves, not by the mouth, but by the ventral surface, and undergo the remainder of their development there.

The little-known nematode genera Hystrichis and Tropidocerca, which occur in the crop of shore birds, have been restudied by von Linston (*Arch. f. Naturges.*, 1899, pp. 155–164, Pls. XIII, XIV). Many doubtful points in their structure are cleared up.

"Fresh-water Biological Stations: America's Example," by D. J. Scourfield (*Nat. Sci.*, June, 1899, pp. 450–454), reviews the progress in this line of work here and the apparent lack of interest in England. It is certainly true that in this matter at least "England has not done her duty."

The biological investigation of Lake Erie, under the auspices of the U. S. Fish Commission, has made good progress this year. The party, under the direction of Professor Reighard, was located at Put-in-Bay, O., during July. Among other things may be noted that Trochosphæra appeared again, and *Palæmonetes exilipes* was found in large numbers. During August one party made a reconnoissance along the lake shore, while another worked in the deeper water of the open lake.

The first part of the third volume of Kölliker's *Handbuch der Gewebelehre des Menschen* has just appeared under the editorship of Professor Victor von Ebner, and contains an account of the digestive, respiratory, and excretory organs, together with descriptions of such nearly related structures as the organs of taste, the thymus and thyroid glands, the suprarenal bodies, etc.

No. 5 of the second volume of the *Zoölogical Bulletin* contains the following contributions: "A Male Erpetocypris Barbatus Forbes," by C. H. Turner; "The Reduction Divisions in the Spermatogenesis of Desmognathus Fusca," by B. F. Kingsbury; "Ovarian Structure in an Abnormal Pigeon," by M. F. Guyer; "Some Interesting Egg Monstrosities," by C. W. Hargitt; "A Redescription of Pariotichus Incisivus Cope," by E. C. Case; and "On the Pithecoid Type of Ear in Man," by H. Ayers.

Beginning with the third volume, the *American Journal of Physiology* will be issued in monthly instead of quarterly parts. In this change, however, an increase in the total annual output is not contemplated. The first number under the new arrangement contains the following articles: "The Relaxation of the Bladder Muscles of the Cat," by C. C. Stewart; "The Reaction of Amœba to Lights of Different Colors," by N. R. Harrington and E. Leaming; "Metabolism in the Submaxillary Gland during Rest and Activity," by Y. Henderson; "Studies in the Contraction of Smooth Muscle," by R. S. Woodworth; and "A Comparative Study of Reflex Action after Complete Section of the Spinal Cord in the Cervical or Upper Dorsal Region," by B. Moore and H. Oertel. The second number is made up as follows: "The Origin of Fibrinogen," by Albert Mathews; "A Contribution to the Comparative Physiology of Compensatory Motions," by E. P. Lyon; "The Functional Adaptability of Afferent Nerve Fibres," by S. P. Budgett and J. Green, Jr.; and "Comparison of the Effects of Certain Inorganic Solutions and Solutions Containing Serum Albumin on the Rhythmic Contractility of the Frog's Heart," by E. C. Walden.

The second part of Vol. XV of the *Journal of Morphology* contains the following articles: "The Ovarian Egg of Limulus, a Contribution to the Problem of the Centrosome and Yolk Nucleus," by J. P. Munson; "The Lateral Line System of Batrachus Tau," by C. M. Clapp; and "Comparative Cytological Studies, with Especial Regard to the Morphology of the Nucleolus," by T. H. Montgomery, Jr. It is to be regretted that while this number is dated November, 1898, it should not have been issued till August, 1899.